SONY

Video Editing Controller/Titler

RM-E700

English

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.



OWNER'S RECORD

The model and serial numbers are located at the bottom. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. RM-E700 Serial No.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.





This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Recrient the receiving antenna

Relocate the equipment with respect to the receiver Move the equipment away from the receiver

Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

For the customers in Canada

This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

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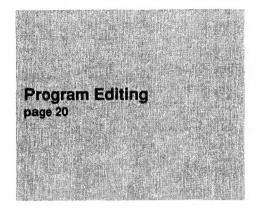
We recommend proceeding step by step from step 1.

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What You Can Do with the RM-E700

How do you enjoy the video camera recording? What is your most favorite subject: family, friends, sports, or scenery? Playing back those picture will remind you of the joyful, or exciting atmosphere of the time. But, if it were possible to delete unnecessary scenes and change the order of some scenes, how much more impressive...... The RM-E700 is the answer. The RM-E700 allows you to edit your tape with an easy operation.

In these operating instructions, we use an 8 mm video camera recorder as a player for example.



In the program editing, you can designate the start and end points of the desired scenes, then connect them by simply pressing the PGM EDIT button. You can designate up to 20 Cuts for editing one program. If you have a video camera recorder like the Sony CCD-V800/V800E/V801 which can store the RC time code*, you can designate up to 99 Cuts.

* RC (rewritable consumer) time code

The TV screen displays 30 frames of pictures per second for the NTSC system and 25 frames of pictures per second for the PAL system. The RC time code indicates the absolute position of the tape with hour, minute, second and frame. Since the time code number exactly corresponds to every frame of picture, it functions as an accurate tape counter so that accurate editing is possible.

This is a special time code for consumer 8 mm products, and is not compatible with the 8 mm time code for institutional 8 mm products.

Scene-by-Scene Editing page 30

In scene-by-scene editing, you locate only the beginning of the desired scenes and connect them one by one.

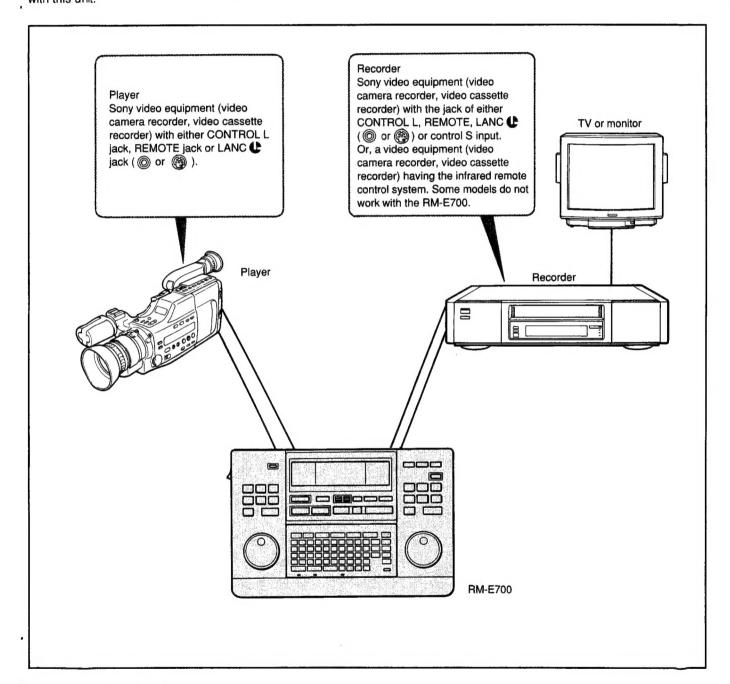
Creating/Displaying Titles page 32

The title keyboard allows you to create and store a character title. Also you can use a video image for a title.

This unit is not provided with the insert editing function.

The Video Equipment Used with This Unit

To use this unit, you need a video player and a video recorder. You can use only the following video equipment with this unit.



About the & (LANC) mark

♠ (LANC) stands for Local Application Control Bus System. The ♠ (LANC) jack is used for controlling the tape transport of video equipment and peripherals connected to it. This jack has the same function as the jacks indicated as CONTROLL or REMOTE. WHEN YOUR RECORDER IS DESIGNED BASED ON THE SECAM COLOR SYSTEM, THE OPTIONAL PAL-SECAM TRANSCODER IS NECESSARY TO CONNECT THE PM-E700 AND THE RECORDER.

Precautions

On safety

On power sources

On installation

On cleaning

On operation

Caution

Television programmes, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

- Do not open the cabinet. Refer servicing to qualified personnel only.
- Should any liquid or solid object fall into the cabinet, disconnect the power source and have the unit checked by qualified personnel before operating it any further.

Operate the unit only on 6 V DC. For AC operation, use only the supplied AC-D4L AC power adaptor.

Do not use any other AC power adaptor as it may cause malfunction.

Do not install the unit near a heat source such as a radiator or an air duct, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

Clean the cabinet, panel and controls with a soft dry cloth, or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of solvent, such as alcohol or benzine, which might damage the finish.

Before you record one-time events, make a trial recording to make sure that the recorder is working perfectly.

Note on AC power adaptor

If an AC power adaptor not manufactured by Sony is used, a fuse must be installed in the battery cord and the polarity of the plug must be as illustrated.

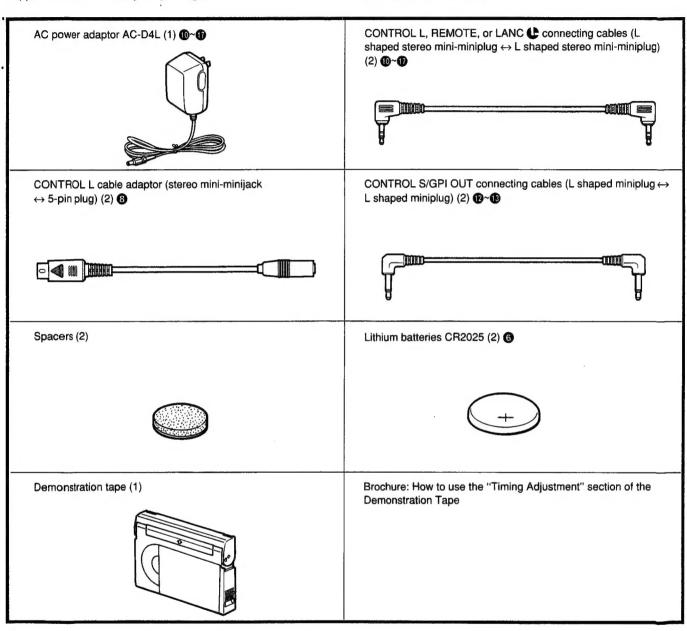


If you have any questions about this unit contact your Sony dealer.

Supplied Accessories

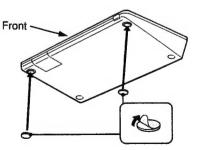
Before using this unit, make sure that you have all the supplied accessories in your package.

For details on the use of each item, refer to the pages indicated in the circle lacktriangle.



How to use the supplied spacers

Use the spacers as the stoppers. Attach the spacers to the front rubber feet as illustrated.



Inserting the Lithium Batteries

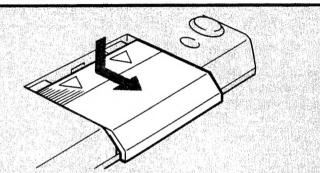
This unit uses two lithium batteries to keep the data for program editing, the data for timing adjustment, and the stored remote control signal of other manufacturer's video equipment.

The lithium battery compartment is located at the bottom.

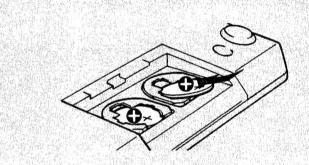
How to insert

In step 4, make sure that the AC power adaptor is connected before turning on the power. Otherwise, the lithium battery will be consumed quickly.

Open the cover of the lithium battery compartment.



2 Insert the supplied two CR2025 lithium batteries with correct polarity.



Close the cover.

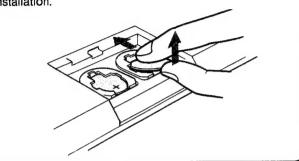
4

Connect the supplied AC power adaptor to the DC IN 6V jack at the rear, and turn on the POWER switch.

Check that the △ mark does not appear in the display window.

To remove the lithium batteries

Press the side of the battery in the direction indicated for installation.



Lithium battery life

Approximately 1 year in normal operation.

When the lithium batteries become weak, the A mark will light in the display window. When this happens, replace the battery with a Sony CR2025 lithium battery. Use of another battery may present a risk of fire or explosion.

Note

To keep the data, replace the lithium batteries with the AC power adaptor connected. If you replace the lithium batteries when the AC power adaptor is not connected, the data will be erased. Also, when the lithium batteries are completely discharged, the data will be erased. In this case, store them again.

Notes on lithium battery

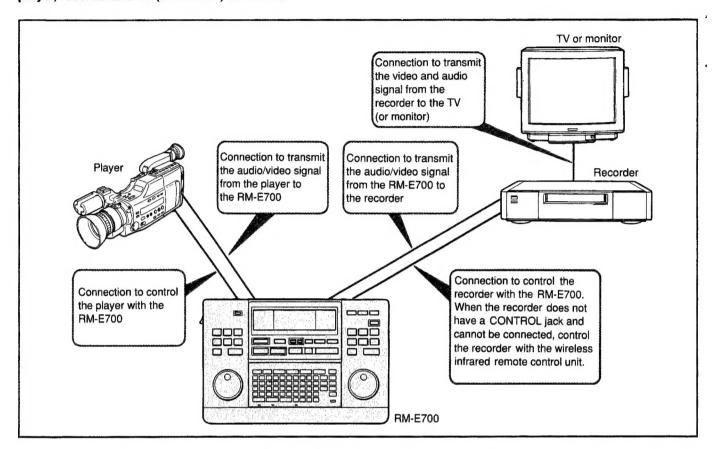
- Keep the lithium battery out of the reach of children.
 Should the battery be swallowed, immediately consult a doctor
- Wipe the battery with a dry cloth to assure a good contact.
- Be sure to observe the correct polarity when installing the battery.
- Do not hold the battery with metallic tweezers, otherwise a short-circuit may occur.

WARNING

Battery may explode if mistreated.

Do not recharge, disassemble or dispose of in fire.

To use the RM-E700, connect the RM-E700 with the player, recorder and TV (or monitor) as follows.



Notes on Connection

- Be sure to turn off the power of the RM-E700, player, recorder and TV (or monitor) before connection.
- Be sure to supply the power to the recorder and the player from a wall outlet using an AC power adaptor. Do not use the battery pack for the power source as they may run out during editing.

Note on the supplied cable adaptors for the CONTROL L jack

When the CONTROL L, REMOTE, or LANC **t** jack is a 5-pin (A) type, use the supplied cable adaptor.



Notes on the connection of the player and the recorder

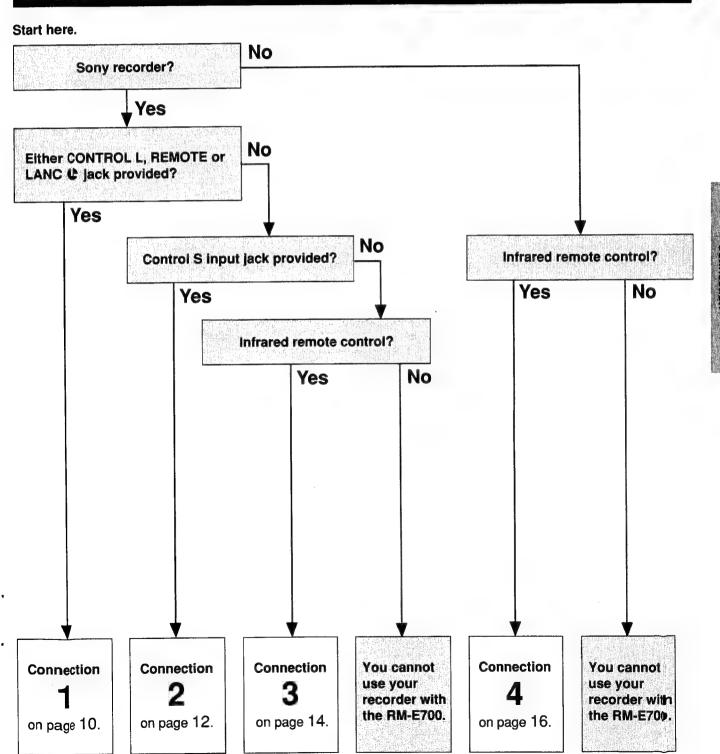
- Connect the red plug to the audio right jack (red) and the white plug to the audio left jack (white).
- · Connect the yellow plug to the video jack (yellow).
- When the player or the recorder is a monaural type, use a monaural A/V connecting cable such as VMC-910MS/ 920MS (phono plug × 2 ↔ phono plug × 3).
- When both the player and the recorder have the S video jacks, we recommend connecting the S video jacks.
- The signal input to the S video jack is output only from the S video jack. The signal input to the video jack is output only from the video jack. The RM-E700 does not convert the S video signal into the composite video signal or vice versa.

See page 54 for the optional connecting cables.

Finding Out Your Connection

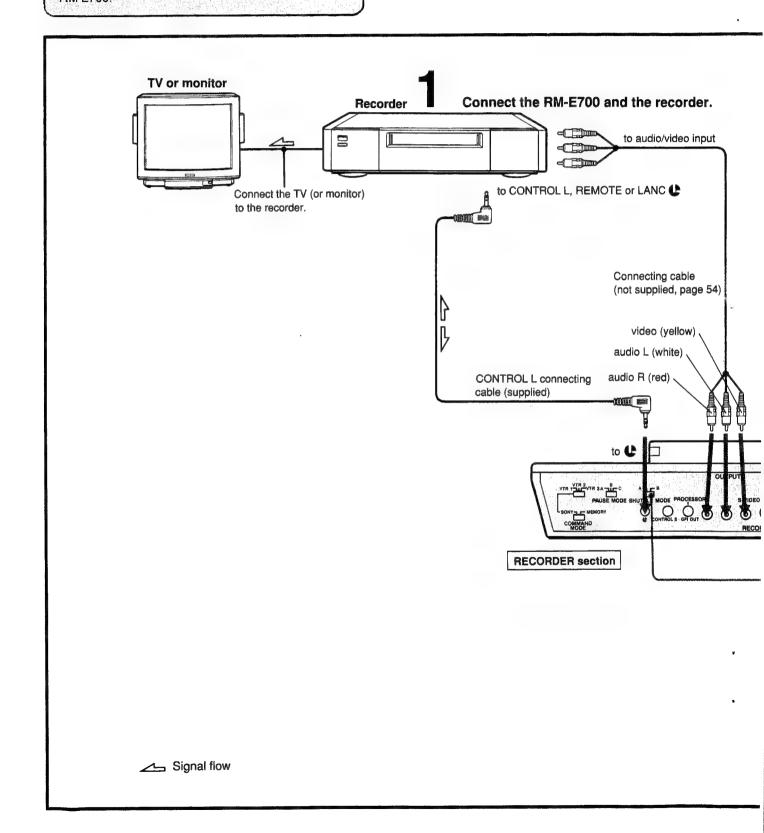
There are 4 ways of connection according to the recorder. Follow the flowchart below to find out the connection for your recorder, then go to the appropriate page. How to connect the RM-E700 with the player, recorder and TV (or monitor) of your case is explained on that page.

Which is the Connection for Your Recorder?



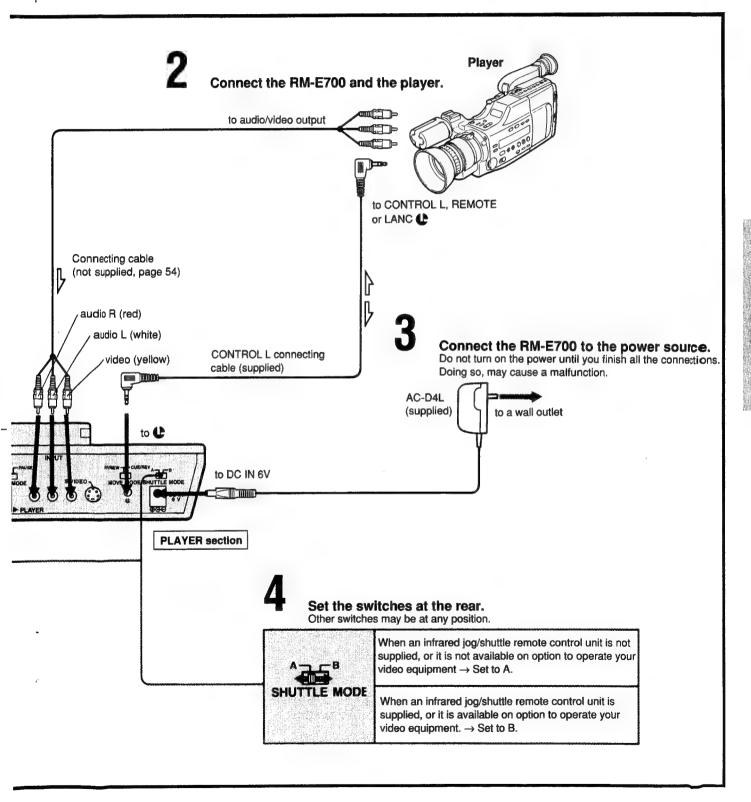
Connection 1

Use this connection when you have a Sony recorder with either CONTROL L, REMOTE, or LANC & jack. After connection, set the switches at the rear of the RM-E700.



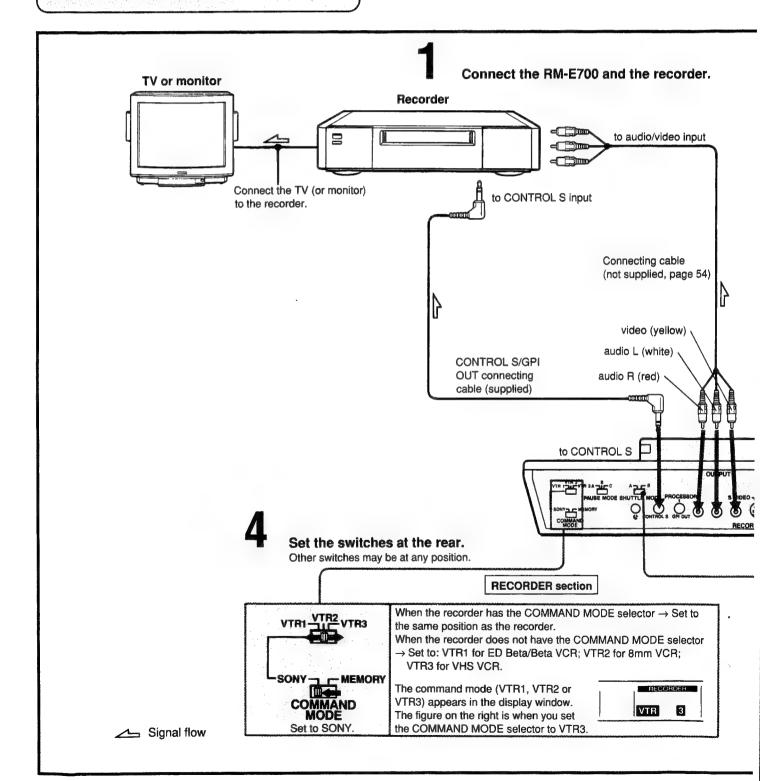
Note on models SLV-50, SLV-70HF, SLV-401 and SLV-402VPS

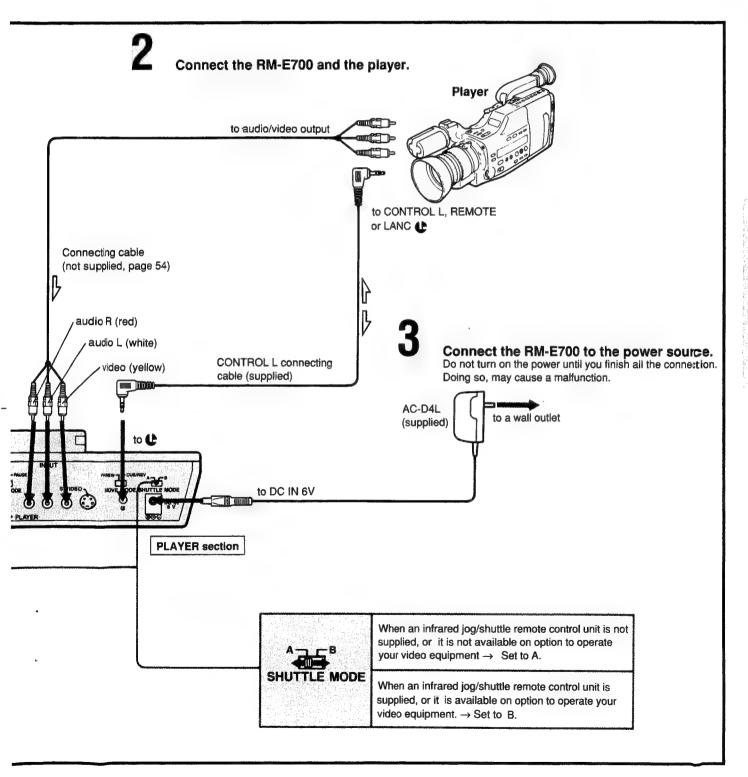
When you use the above model for the recorder, the editing is not possible with the CONTROL L or LANC Connection. To edit, use the Connection 2 (Control S connection).



Connection 2

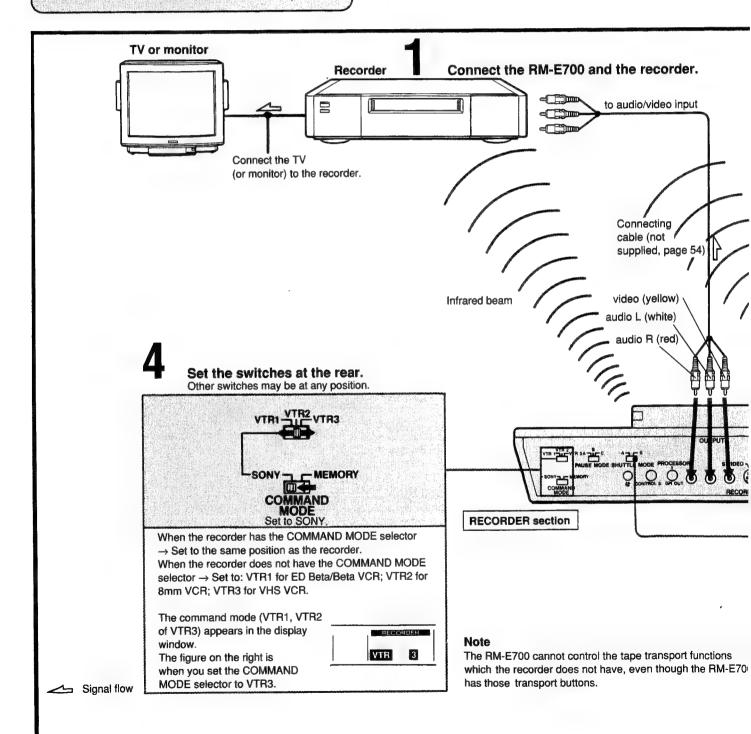
Use this connection when you have a Sony recorder with the CONTROL S input jack only. After connection, set the switches at the rear of the RM-E700. When your recorder has the CONTROL S input jack and a CONTROL L, REMOTE, or LANC & jack, we recommend using "Connection 1".





Connection 3

Use this connection when you have a Sony recorder with the infrared remote control unit, but without the CONTROL L, REMOTE, LANC , or CONTROL S input jack. Control the recorder by transmitting the infrared signal from the RM-E700 to the infrared beam detector of the recorder. After connection, set the switches at the rear of the RM-E700.



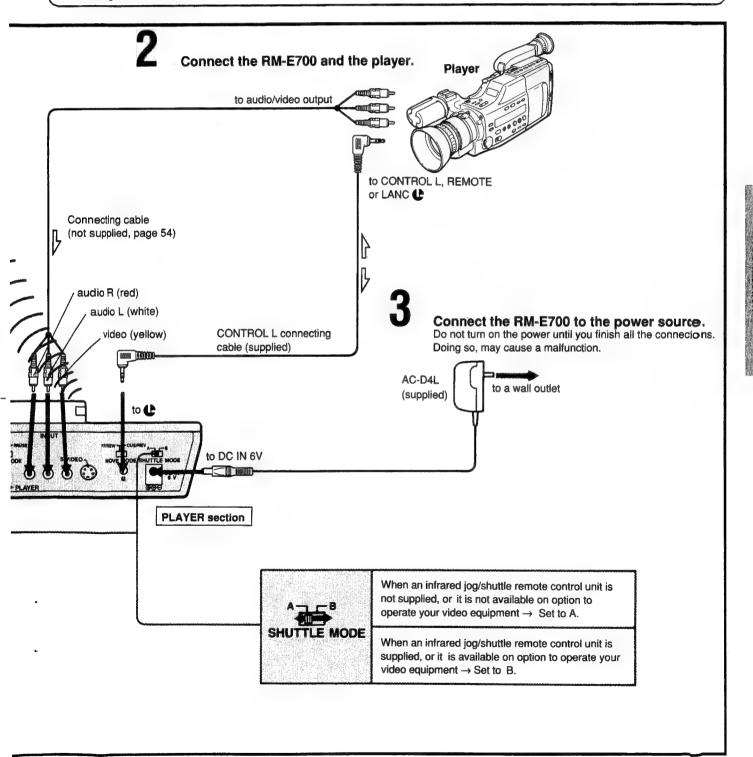
Caution

When the player is a video camera recorder or a video cassette recorder controlled by an infrared remote control unit, the player may detect the control signal from the RM-E700 to the recorder, resulting in faulty operation. (At worst, the recorded contents in the tape may be erased.*)

To protect the recorded contents, set the safety tab to prevent recording or break off the tab.

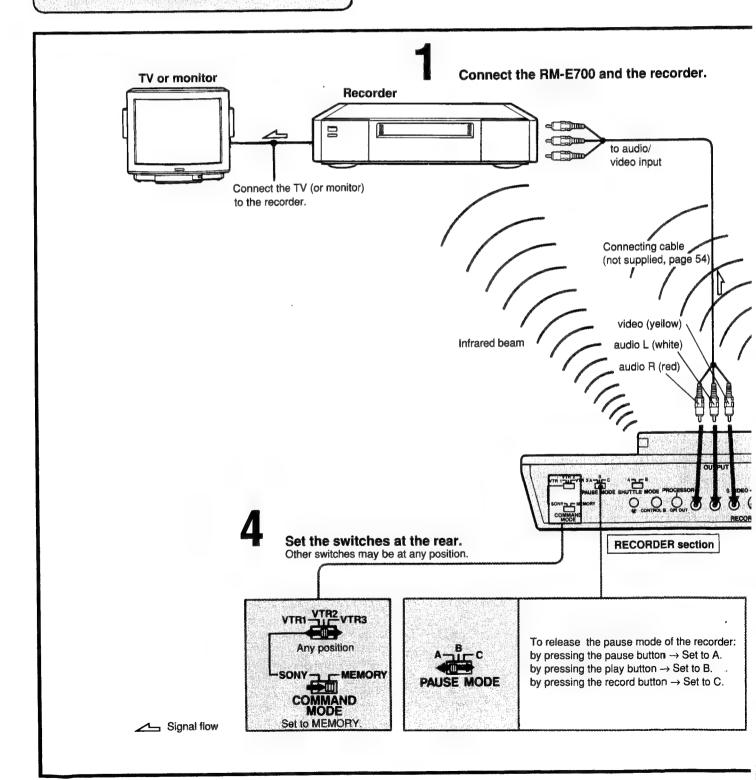
When the player has the infrared beam detector:

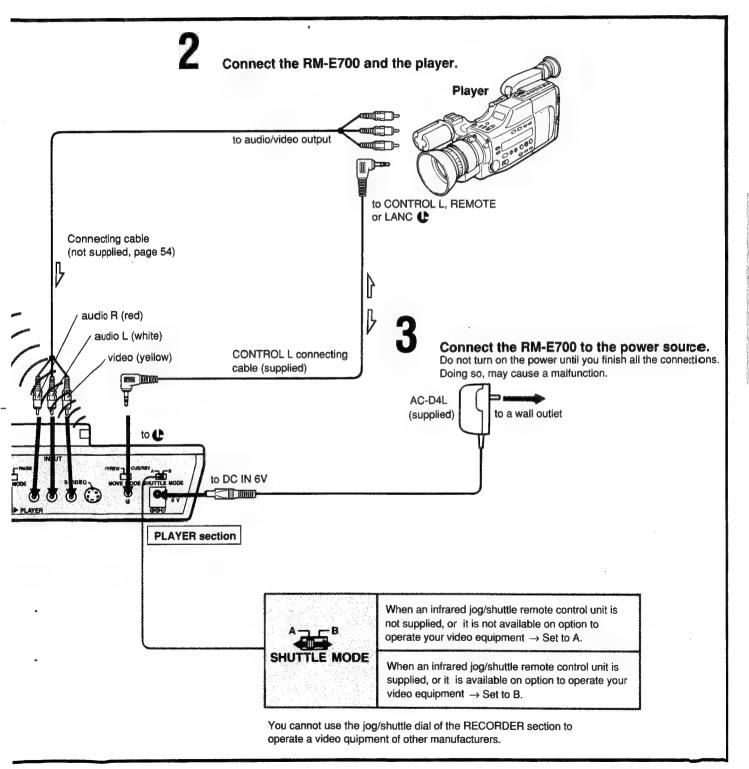
- · Set the command mode selector on the player to OFF, or to a different position from that of the recorder.
- Or,
- · When the player does not have the command mode selector, cover its infrared beam detector with thick black paper.



Connection 4

Use this connection when you have another manufacturer's recorder with an infrared remote control unit. After connection, set the switches at the rear of the RM-E700, and then store the tape transport functions of the recorder's remote control unit. For the store operation, see page 18.





Storing the Functions of the Remote Control Unit in the RM-E700

When you use an other manufacturer's recorder, store the control signal of the tape transport, so that the RM-E700 can operate the recorder.

However, you cannot use the jog/shuttle dial to operate the recorder.

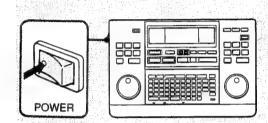
To avoid mistakes in editing, store at least the following six functions of the remote control unit on the same button of the RM-E700.

► (playback), REC (recording), STOP, II (pause), ►► (fast-forward), ◄◄ (rewind)

Operation

Point the remote control unit of the recorder at the infrared beam detector of the RM-E700.

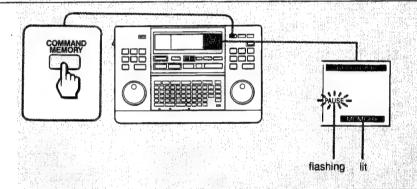
Turn on the power of the RM-E700.



Press the COMMAND MEMORY button.

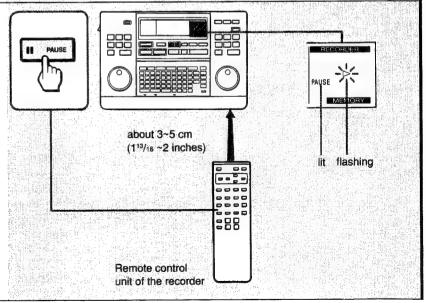
The RM-E700 enters the learning mode. ____

The MEMORY indication lights up, and the PAUSE indication flashes in the display window.



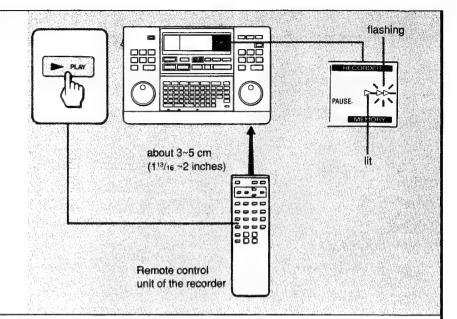
While PAUSE is flashing, keep pressing the II button of the remote control unit of the recorder. When PAUSE lights up, release the II button.

The RM-E700 has learned the pause function. Then ▷ (playback) flashes.



While ▷ is flashing, keep pressing the ▶ button of the remote control unit of the recorder. When ▷ lights up, release the ▶ button.

The RM-E700 has learned the playback function. Then ▷▷ (fast-forward) flashes.



Repeat step 3 or 4 to store the functions of other buttons.

The indicator flashes in the order of:

 \triangleright (fast-forward) \rightarrow \triangleleft (rewind) \rightarrow STOP \rightarrow REC (recording) \rightarrow 00 \triangleright (frame advance playback)

→ D> (slow speed playback) → ×2 (double speed playback)

When the RM-E700 has learned all the functions, the learning mode is cancelled after 3 seconds.

Check that the recorder operates correctly by pressing the buttons of the RECORDER section. If the recorder does not operate correctly, try again from step 2.

Notes

- To turn off the power of the RM-E700, first turn the POWER switch off, then disconnect the AC power adaptor from the RM-E700. If you do this in the reverse order, the stored data will be erased, and the lithium battery will be consumed quickly.
- The RM-E700 cannot store the functions of some remote control units such as those using supersonic waves.

Press the button within 30 seconds

Press the button within 30 seconds while the indication is flashing. Otherwise the indications disappear and learning mode is canceled. In this case, try again from step 2.

When the remote control unit of the recorder does not have the same button as the flashing indication

You can store any desired function for the flashing button. Press the desired button.

To cancel the learning operation

Repeat pressing the COMMAND MEMORY button until the ×2 indication flashes. Press the COMMAND MEMORY button again.

To erase the stored function

Press the AC button while the MEMORY indication is on.

To change the stored function

Repeat pressing the COMMAND MEMORY button until the indication to be changed appears. Press the button of the function to be stored instead. The previous function is erased.

Notes

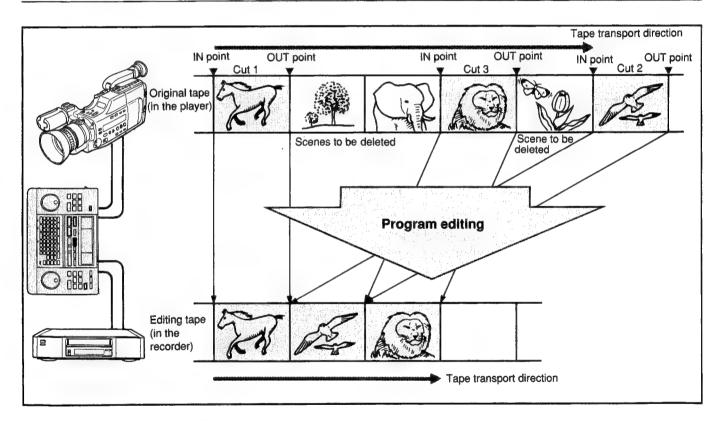
- Press the button firmly for more than 3 seconds until the indication changes from flashing to lighting steadily. Then wait for 1 second after the next indication starts flashing, and store the next function.
- Do not press another button until the indication stops flashing.
- During the learning operation, you cannot control the player and recorder with the RM-E700.
- When the power is turned off during the learning operation, the stored data will be erased.
- During the learning operation, do not move the RME 700 and the remote control unit.

What is Program Editing?

Editing means to make a new tape from a prerecorded tape by deleting the unnecessary scenes and allocating the necessary scenes in the desired order.

The words used in this operating instructions are specified as follows:

Cut	The each scene to be allocated for editing		
IN point	The start point of a Cut		
OUT point	The end point of a Cut		
Program	The group of Cuts of desired length and allocation		
Program editing	The automatic editing function of the RM-E700 performed by pressing the PGM (program) EDIT button after making the program.		



 To adjust the lag between the program and edited tape caused by the start time of the recorder or recording pause mode, refer to the supplied brochure: How to use the "Timing Adjustment" section of the Demonstration Tape.

The number of Cuts you can program

You can program up to 20 Cuts for one program editing. If you use a video equipment with the RC time code recording function such as a CCD-V800/V800E/V801 for the player and edit by the RC time code, you can program up to 99 Cuts.

Indications during frame-by-frame playback, slow playback and double speed playback

The following indications appear in the display widow of the PLAYER section.

Direction Playback	Forward playback	Reverse playback
Frame-by-frame	®> and ▷	II⊳ and ⊲
Slow	D⊳ and ⊳	D> and ⊲
Double speed	×2 and ⊳	×2 and ⊲

Notes on the video equipment with the RC time code recording function

When you use the video equipment with the RC time code recording function for the player, observe the following:—

- To perform editing using the RC time code, rewriting the time code from the beginning to the end of the tape is recommended. Otherwise accurate editing by designating the IN point and OUT point by frame is not possible.
- The RC time code is not compatible with the time code of products for institutional use or that of other manufacturers. When editing the tape with a time code other than the RC time code, rewrite the RC time code in the tape first.

Note on operation

During the editing operation, wait for about 1 second between operating each button. This could help to avoid errors.

Preparation before Program Editing

To perform the program editing, prepare the player and the recorder as follows.

Player

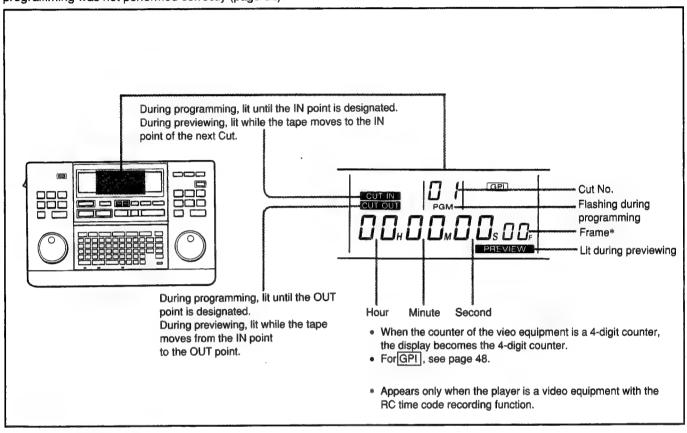
- · Insert the original tape.
- When the player has an input/output selector for the audio/video jack, set it to output.
- When the player has an edit switch, set it to on. It prevents the picture from deteriorating.
- Set the power switch to VTR (PLAYER).
- When the player has a remote control unit, set so that the player is not operated by the remote control unit.
- When the player has an M/S selector, set to S.

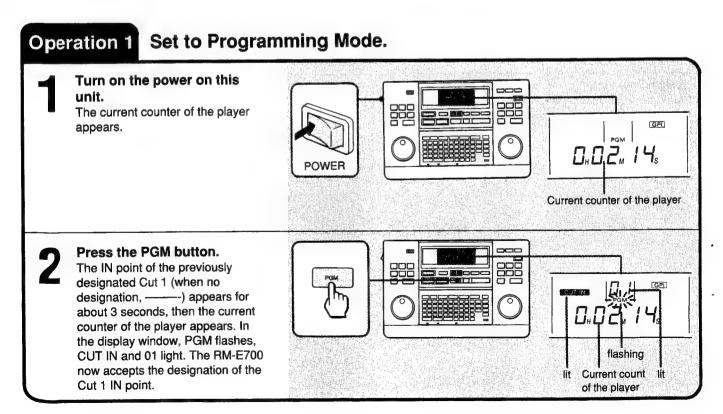
Recorder

- Insert a tape which is ready to be recorded. (Check the position of the safety tab to prevent recording.)
- · Set the input selector to LINE IN.
- Make the necessary settings for recording mode, recording level, etc. (For details, refer to the instruction manual of the recorder.)
- When the recoder has an M/S selector, set to S.

Program Editing—To Edit Scenes in Succession

The following indications appear during programming and previewing. The error messages appear when the programming was not performed correctly (page 52).

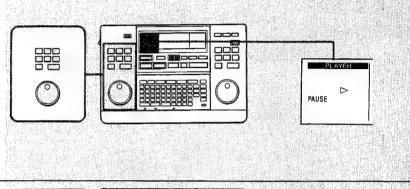




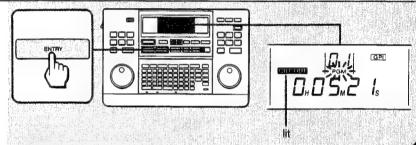
Operation 2 Designate the IN point of the Cut.

Locate the IN point of Cut 1
(1st Cut) using the tape
transport buttons and jog/
shuttle dial of the PLAYER
section, and set the player to
the playback pause mode at
the IN point.

More than about 15 seconds (about 15 counts for the 4-digit counter) of the counter reading is necessary from the beginning of the tape to the IN point.

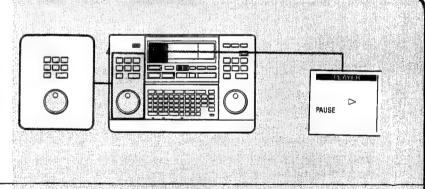


Press the ENTRY button.
The IN point of Cut 1 has been designated. In the display window, CUT IN disappears and CUT OUT lights. The RM-E700 now accepts the designation of the Cut 1 OUT

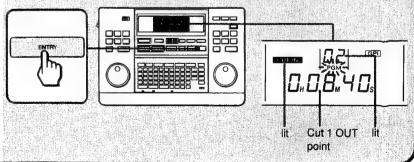


Operation 3 Designate the OUT point of the Cut.

Locate the OUT point of Cut 1 using the tape transport buttons and jog/shuttle dial of the PLAYER section, and set the player to the playback pause mode at the OUT point. More than about 3 seconds (about 3 counts for the 4-digit counter) of the counter reading is necessary from the OUT point to the end of the tape.



Press the ENTRY button.
The OUT point of Cut 1 has been designated. In the display window, CUT OUT disappears, CUT IN and 02 light. The RM-E700 now accepts the designation of the Cut 2 IN point.



Continued on next page

Operation 4

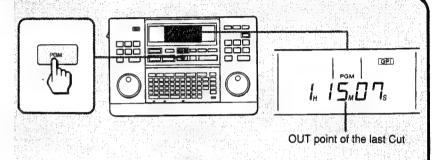
Repeat Operations 2 and 3 to designate the other Cuts.

Operation 5

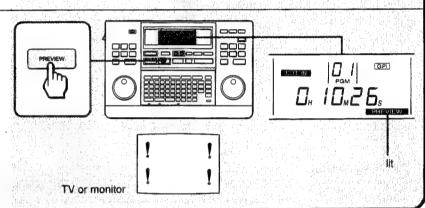
Finish the designation of the Cuts.

After designating all Cuts, press the PGM button.

In the display window, PGM turns from flashing to lighting steadily. The program has been designated.



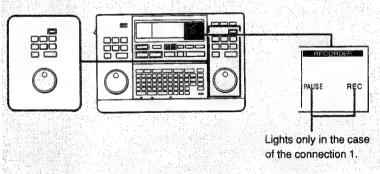
To preview the program, press the PREVIEW button. (If you do not want to preview, skip this step.) The tape is played back and exclaimation marks (!) appear at the corners from the IN point to the OUT point of the designated Cut. To stop preview, press the PREVIEW button or the STOP button of the PLAYER section. To change the IN and OUT points, see page 27.



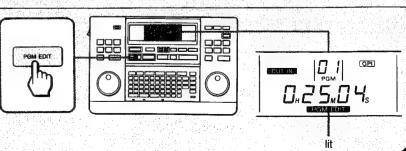
Operation 6

Perform the program editing.

Locate the editing start point using the tape transport buttons and jog/shuttle dial of the RECORDER section, and set the recorder to the recording pause mode.



Press the PGM EDIT button.
PGM EDIT lights in the display window, and the RM-E700 starts program editing automatically.



- The program editing is not possible when the maximum recording pause mode period of the recorder is shorter than the transporting time from a Cut to the next Cut of the original tape in the player.
- After programming, do not take the original tape out of the player until the program editing is performed.

To stop program editing

Press the PGM EDIT button.

Or, press the ■ STOP button of either the PLAYER or RECORDER section.

Note on recording pause mode

For some types of recorders, you must press the record button in the playback pause mode to enter the recording pause mode.

To reset the counter of the player to 00H00M00s (00 00)

Press the COUNTER RESET button.

When you edit by the RC time cord, the COUNTER RESET button does not operate.

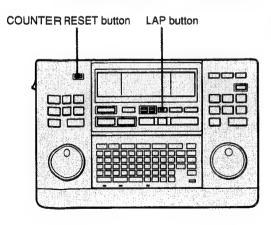
To check the total program time

When the counter of the player shows the hour/minute/ second indication, you can check the total program time together with the designated cut numbers until the last programmed Cut.

Press the LAP button.

In the display window, 01 and the time of Cut 1 appear, then the Cut numbers from 2 and the total program time until the displayed Cut number appear every 1 second in sequence. Meanwhile, the TOTAL LAP indication appears. After the time of all the designated Cuts is shown, the Cut number indication disappears and the total program time remains.

To turn off the total program time, press the LAP button again. The RM-E700 returns to the programming mode.



How the player operates during the program editing or previewing

During the program editing or previewing, the player starts to playback from about 15 seconds (about 15 counts for the 4-digit counter) before the IN point. The player stops at about 2 seconds (about 2 counts for the 4-digit counter) after the OUT point.

Using the MOVE MODE selector at the rear, you can select tape transport mode between the Cuts. Set the MOVE MODE selector before the program editing or previewing.

- To fast-forward or rewind the tape, set to FF/REW.
 When the interval between the Cuts is within about 1 second, the player performs normal playback or fast-forward/reverse playback.
- To playback while fast-forwarding or reversing, set to CUE/REV (review).

When the interval between the Cuts is within about 15 seconds, the player performs normal playback.

How to use the END MODE selector at the rear

Using the END MODE selector, you can select either the stop mode or pause mode for the player and recorder to be set to after program editing, and for the player to be set to after previewing. Set the END MODE selector before program editing or previewing.

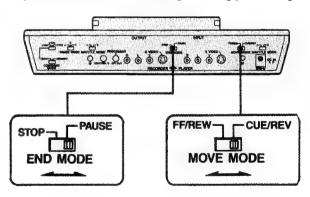
To set to stop mode \rightarrow Set the END MODE selector to STOP.

To set to pause mode \rightarrow Set the END MODE selector to PAUSE.

Stop mode is recommended when you may leave the site during program editing or previewing.

Pause mode is recommended when:

- you continue program editing.
- you find out a Cut to be changed during previewing.



Program Editing—To Edit Scenes in Succession

To minimize the lag between the program and the edited tape

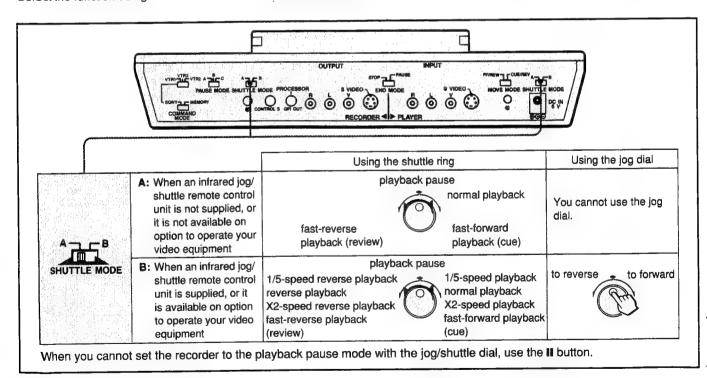
It is inevitable that a lag occurs between the program and the edited tape. There are three causes. One of them is that the IN and OUT points are designated by the counter readings. To minimize the lag by other two causes, we suggest the following.

Cause	Countermeasure
 The IN and OUT points are set by the counter reading, and there is a lag between the playback picture and the counter reading of the player*. 	We recommend using the picture search to designate the IN and OUT points.
There is a lag at the start time or at the recording pause of the recorder.	Perform the timing adjustment referring to the brochure: How to use the "Timing Adjustment" section of the Demonstration Tape — for more accurate recording of the IN and OUT points during program editing.

^{*} There is no lag when you edit by the RC time code.

Operating the Jog/Shuttle Dial

The operation is the same for both the jog/shuttle dials of the PLAYER and RECORDER sections. If connection 4 (page 16) is used, you cannot use the jog/shuttle dial of the RECORDER to control the recorder. Select the function using the SHUTTLE MODE selector at the rear.



Notes

The jog/shuttle dial may operate wrong in the following cases.

- When you turn the jog/shuttle dial too quickly.
- The jog/shuttle dial may not be operative for the connections other than Connection 1. (page 10)
- When the player or the recorder is slow to react to signals from the remote control unit.
- When you do not need to keep pressing the button of the remote control unit of the video equipment to do the picture search.

Changing the IN and OUT Points

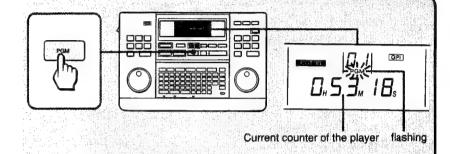
To change the IN point or the OUT point of a Cut, call up the point to be changed on the screen using the ⇔PGM, PGM⇒, and GOTO buttons. Then designate the desired point again.

Operation

Let's change the IN point of Cut 5 for example. When changing the IN/OUT point during programming, skip step 1.

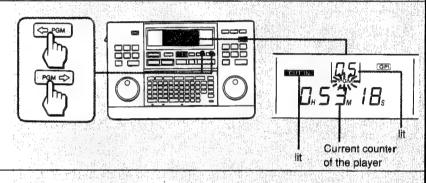
Press the PGM button.

The IN point of Cut 1 appears for about 3 seconds, and then the current counter of the player appears.

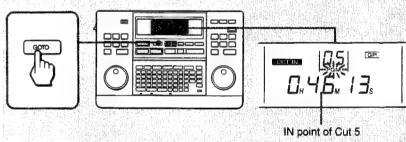


Press the ← PGM or PGM ⇒ button until the CUT IN indication for Cut 5 appears. The IN point of Cut 5 appears for

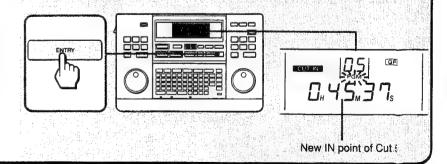
The IN point of Cut 5 appears for about 3 seconds, and then the current counter of the player appears.



Press the GOTO button.
The player sends the original tape to the IN point of Cut 5 and enters playback pause mode.



Locate and designate the scene to be replaced as the IN point of Cut 5, using the tape transport buttons and jog/shuttle dial of the PLAYER section.



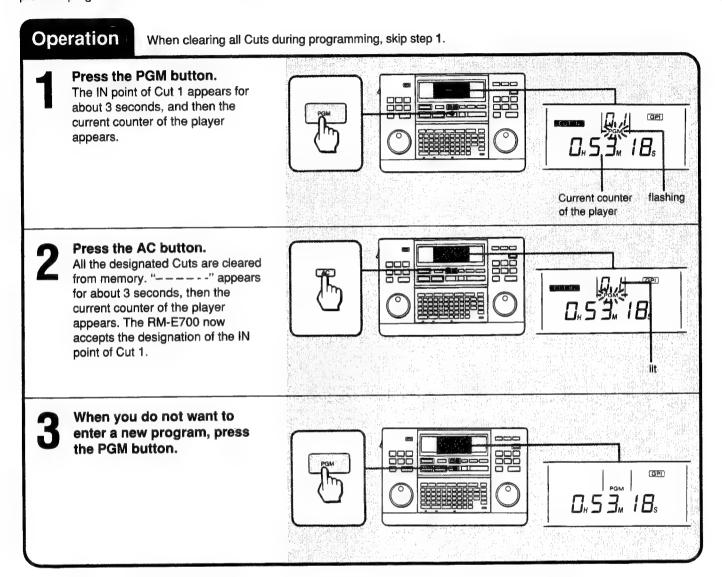
How the player operates when the GOTO button is pressed

Using the MOVE MODE selector, you can select the tape transport mode of the player when you press the GOTO button. Set the MOVE MODE selector before pressing the GOTO button. When you edit by the RC time code, there will be the lag of several frames at the stop position.

- To fast-forward or rewind the tape, set to FF/REW. When
 the current position of the tape is close to the designated
 IN or OUT point, the player performs normal playba; k or
 fast-forward/reverse playback.
- To playback while fast-forwarding or reversing, set to CUE/REV. When the current position of the tape is alose to the designated IN or OUT point, the player performs normal playback.

Clearing All Cuts

How to clear all the designated Cuts in the program is explained here. Use this procedure also to clear the previous program.



Deleting a Cut

When you want to delete a Cut in the program, first delete the IN point and then the OUT point.

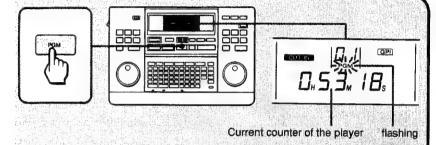
Operation

Let's delete Cut 5 for example.

When deleting the Cut during programming, skip step 1.

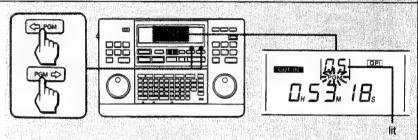
Press the PGM button.

The IN point of Cut 1 appears for about 3 seconds, and then the current counter of the player appears.



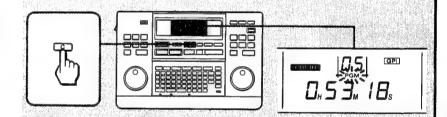
Repeat pressing the ⇔PGM or PGM⇒ button until the CUT IN indication for Cut 5 appears.

The IN point of Cut 5 appears for about 3 seconds, and the current counter of the player appears.



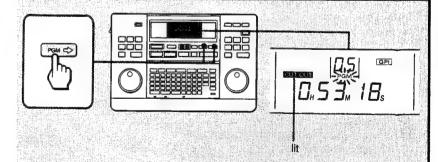
Press the C button.

The IN point of Cut 5 is cleared from memory. "----" appears for about 3 seconds, and then the current counter of the player appears.



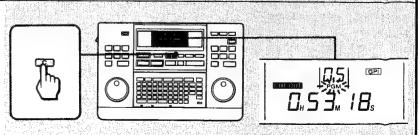
Locate the OUT point of Cut 5 by pressing the PGM⇔ button.

The OUT point of Cut 5 appears for about 3 seconds, and then the current counter of the player appears.



Press the C button.

The OUT point of Cut 5 is cleared from memory. "-----" appears for about 3 seconds, and then the current counter of the player appears.

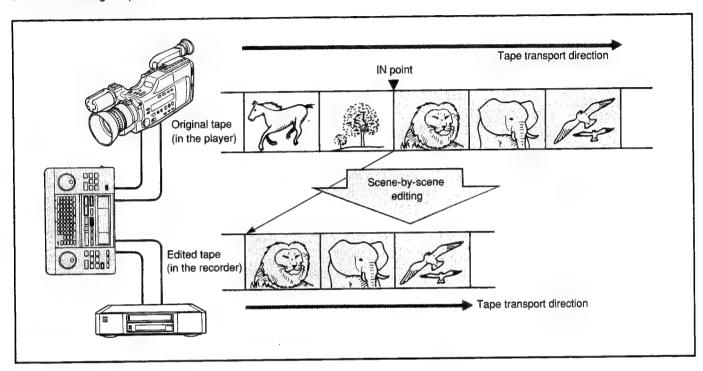


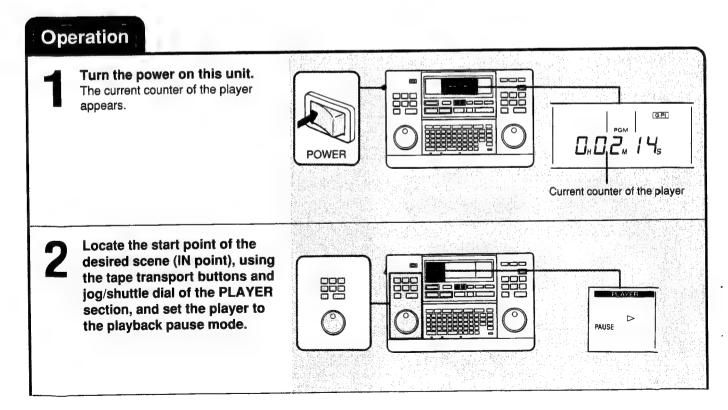
Program Editing

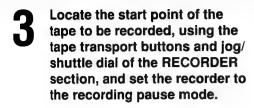
Step 3 Scene-by-Scene Editing, Creating/Displaying Titles Scene-by-Scene Editing — To Edit Scenes One by One

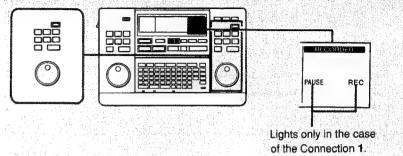
What is Scene-by-Scene Editing?

In scene-by-scene editing, you designate only the IN point of the scene. Then you select and connect the scenes one by one while viewing the picture.



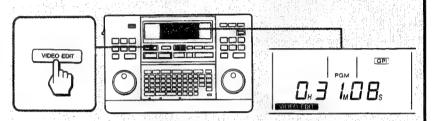






Press the VIDEO EDIT button.

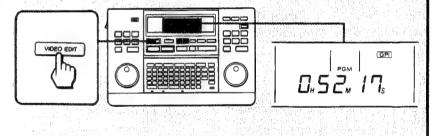
The VIDEO EDIT indication lights and the RM-E700 starts scene-by-scene editing. The player rewinds the tape about 15 seconds before the IN point and starts playback. The recorder starts recording from the IN point.



Press the VIDEO EDIT button at the end of the desired scene.

The VIDEO EDIT indication turns off. The player continues playback for about 2 seconds and enters the playback pause mode. The recorder immediately enters the recording pause mode.

The END MODE selector at the rear does not work for scene-by-scene editing.



6

Repeat from step 2 to 5.

To stop scene-by-scene editing

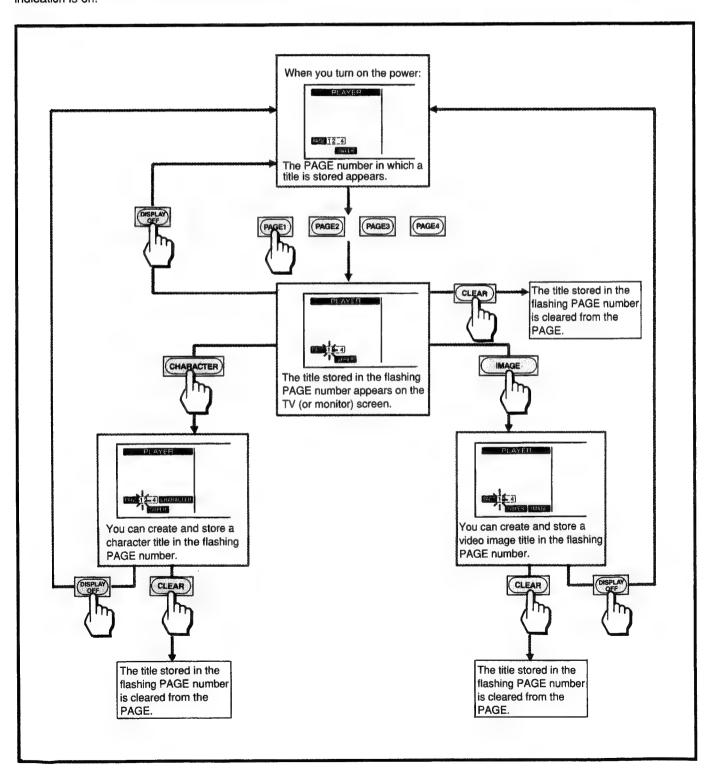
Press the VIDEO EDIT button again, or the STOP button of the PLAYER section.

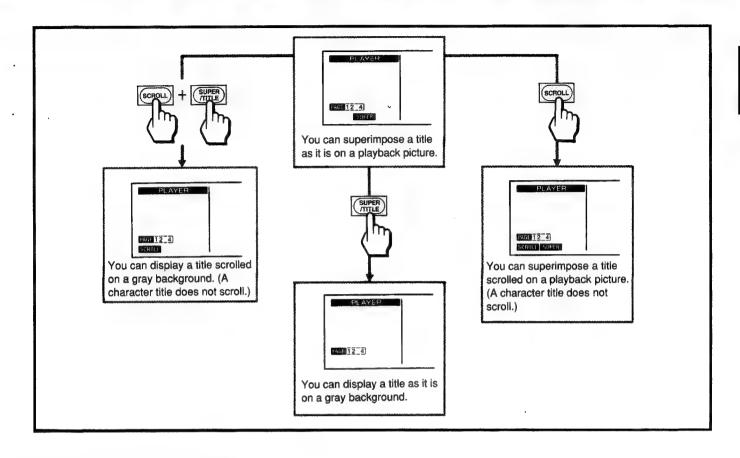
Creating/Displaying Titles

Creating/Displaying Titles

Indications while creating or displaying the title

You can create 4 pages of titles using either characters or video images, and store one each in PAGE 1 to 4. The following chart shows what you can do when each indication is on.





Title to be stored in each PAGE

- To store a fine video image, set the IMAGE 2/4 selector to 2. The density of the video image improves.
- It is possible to store both character and video image titles in one PAGE. The character title is overlaid on the video image title.

IMAGE 2/4 selector	Title to be stored in each PAGE			
	PAGE 1	PAGE 2	PAGE 3	PAGE 4
2 MAGE 4	Character title Video image	Character title Video image	Character title Video image	Character title Video image
2 IMAGE 4	Character title Fine video image	Character title Fine video image	Character title	Character title

Creating a Character Title

Use the title keyboard to create a character title.

How to Use the Title Keyboard

To input a character

After pressing the PAGE and CHARACTER buttons, press the desired letter key.

Check the mode indicators under the CAPITAL, SHIFT and INS buttons.

While the CAPITAL indicator is lit, the title keyboard is in the mode to input capital letters.

While the SHIFT indicator is lit, the title keyboard is in the mode to input the letters on the right part of the key.

While the INS indicator is lit, the title keyboard is in the mode to insert a letter.

To enter each mode, press the CAPITAL, SHIFT or INS button

To release each mode, press the CAPITAL, SHIFT or INS button again. The indicator turns off.

Example

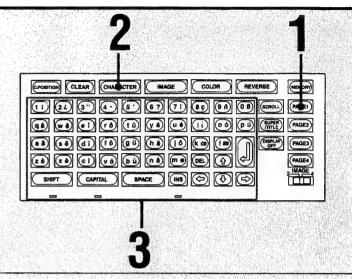
Letter to be input	To Input	CAPITAL indicator	SHIFT Indicator	Press:
Lowercase letter or number on the left part of the key	а	Off	Off	a
Lowercase letter on the right part of the key	ä	Off	Lit	а
Capital letter on the left part of the key	A _.	Lit	Off	а
Capital letter on the right part of the key	Ä	Lit	Lit	а
To put a space between letters	_		_	SPACE key
To insert a letter	_	_		INS key to turn on the indicator, then letter key
To delete a letter		_	_	DEL key
To open a new line	_	_		수 그 key
To move the cursor		_		û,⇔,∜,⇔keys

Operation 1 Type the title.

You can type 12 characters per line, and 4 lines per page. Let's store the following title in PAGE 1, for example.

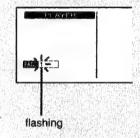
> March 1991 Trip to Greece





Press the PAGE 1 button.



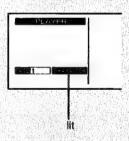


Press the CHARACTER button.

The CHARACTER indication appears in the display window.

The cursor flashes on the screen of the TV (or monitor).





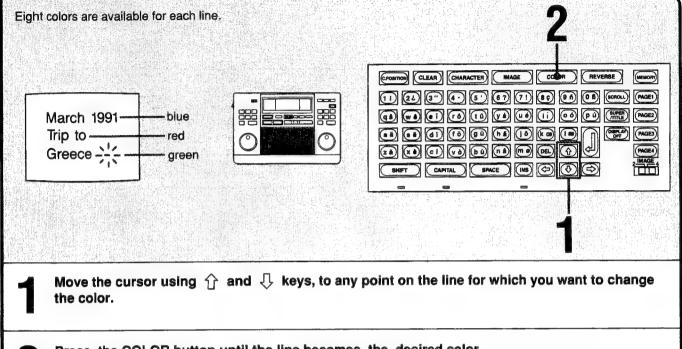
Type in a character.

The typed character appears at the cursor position.

The characters are stored automatically.

If you want to change the color and/or position of the title, go to Operations 2 and/or 3. (page 36)

Operation 2 Select the color.



Press the COLOR button until the line becomes the desired color.

Each time you press the COLOR button; the color changes as follows.

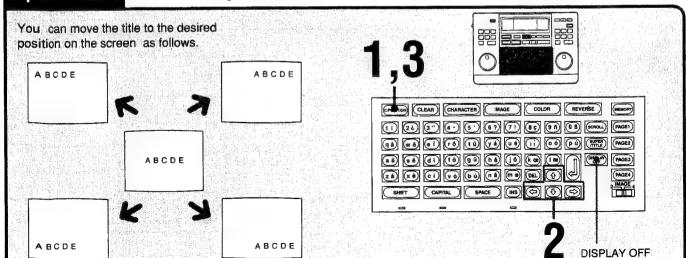
white → violet → cyan → blue

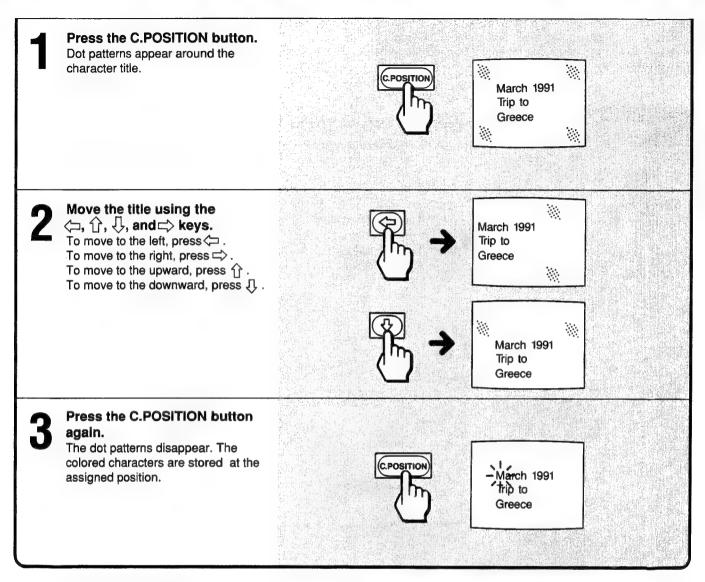
black ← green ← red ← yellow



Repeat steps 1 and 2 for each line.
The characters are stored in the desired color.
If you want to change the position of the title, go to Operation 3.

Operation 3 Select the position.





When you have finished creating the title Press the DISPLAY OFF button. The title disappears.

To create another character title

Press another PAGE button and repeat from step 3 of Operation 1.

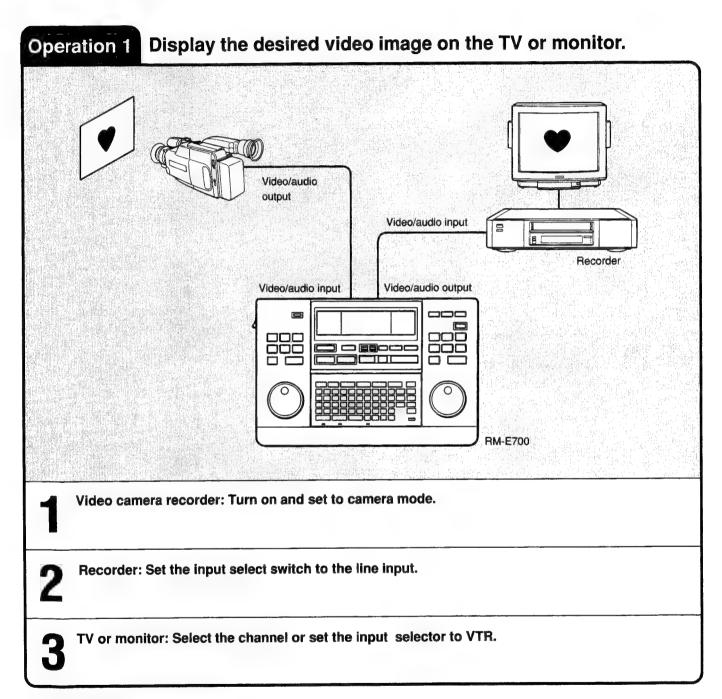
To change the color or position of the character fitle later

You can change the color or position anytime.

- 1 Display the title by pressing the PAGE button of the title.
- 2 Display the CHARACTER indication.
- 3 Follow the same operations as in selecting the color or position.

Creating a Video Image Title

You can create your own title by drawing or writing a title on a stiff piece as paper or cardboard. Use a plain white paper and write the title in a dark color in bold characters. A simple and bold title is recommended.



Hints for shooting

- Check the appearance of the title on your TV or monitor to decide the most effective title size.
- · We recommend using an appropriate light.

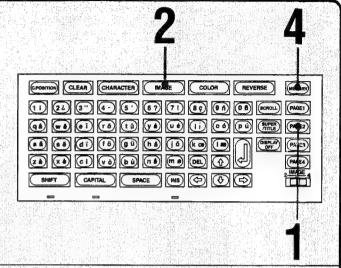
Note

Position the video image with some spaces at the top and bottom portion of the paper. The top and bottom portion may not be included during recording.

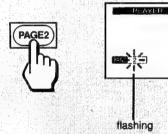
Operation 2 Store the title.

Let's store a video image in PAGE 2, for example. To store the video image using the fine mode, set the IMAGE 2/4 selector to 2.

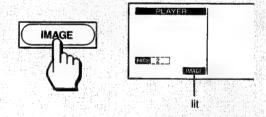




Press the PAGE 2 button.



Press the IMAGE button. The IMAGE indication appears in the display window.



- Check the focusing on the TV (or monitor).
- Press the MEMORY button. The video image is stored in the memory. If you want to change the color, go to Operation 3.





Operation 3

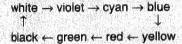
Select the color.

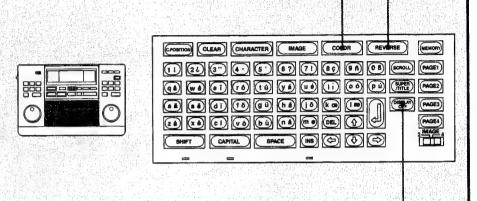
Eight colors are available. The color scheme of the title can be reversed.

To select color, press the COLOR button.



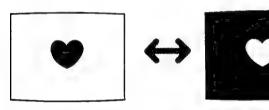
Each time you press the COLOR button, the color changes as follows.





To reverse the color scheme, press the REVERSE button.

To release the reverse mode, press the REVERSE button again.



When you have finished creating the title Press the DISPLAY OFF button. The title disappears.

To store the playback picture of the player as the title

You can use a playback picture in silhouette as a title. The action in the picture will be frozen.

COLOR REVERSE

DISPLAY OFF

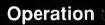
- Press the SUPER/TITLE button until the SUPER indication appears in the display window.
- 2 Press the desired PAGE button.
- 3 Press the IMAGE button so that the IMAGE indication appears in the display window.
- 4 Playback the tape.
- **5** Press the MEMORY button at the desired scene. The video image is stored.

Notes

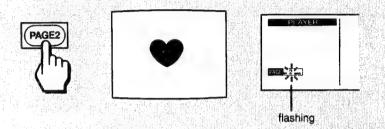
- Select a high contrast scene. The image is processed according to the brightness of the scene.
- When the tape is played back in the picture search mode, in the playback pause mode or in any mode except the normal mode, the picture may be distorted or may not be stored.

Storing Both the Character and Video Image Titles in One PAGE

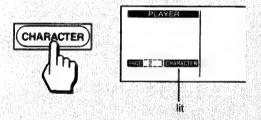
- When you want to store the character and video image titles in one PAGE, proceed as follows. The character title is overlaid on the video image title.
- Let's use the video image stored in PAGE 2, for example.



Press the PAGE 2 button.
The video image appears.



Press the CHARACTER button.
The CHARACTER indication appears in the display window.



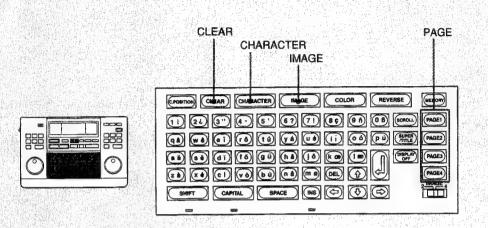
Type the characters.
The characters are stored with the video image in PAGE 2.



Clearing the Stored Title

Operation

You can clear the character and/or video image title from a PAGE.



Press the PAGE button of the title to be cleared.

The title appears on the screen.

Press the CLEAR, CHARACTER, IMAGE buttons as shown in the table below.

Stored title	Title to be cleared	Press:
Character title	Character title	CLEAR
Video image	Video image	CLEAR
	Character title	CHARACTER and then CLEAR
Character title and video image	Video image	IMAGE and then CLEAR
	Both	CLEAR

The title is cleared from the PAGE.

Displaying the Stored Title

How you can display the title on the screen

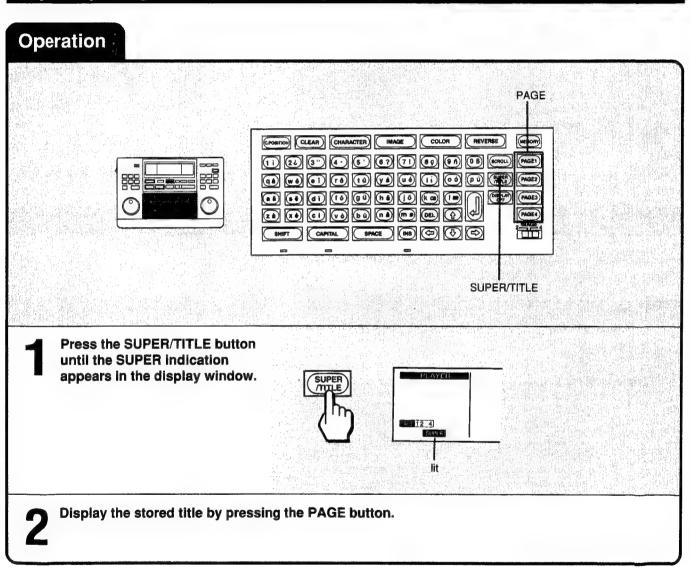
You can display the stored titles in the following ways:

- Superimposed as it is
 - scrolled from bottom to top
- On a gray background as it is
 - scrolled from bottom to top

Note

The character title does not scroll.

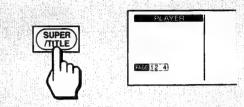
Superimposing the Title on the Playback Picture



Displaying the Title on a Gray Background

Operation :

Press the SUPER/TITLE button until the SUPER indication disappears from the display window.



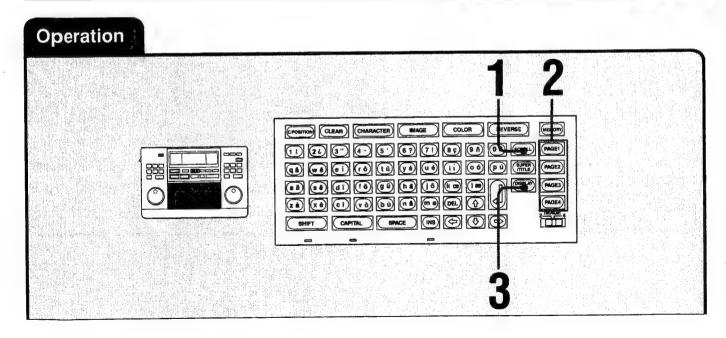
2

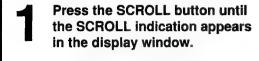
Display the stored title by pressing the PAGE button.

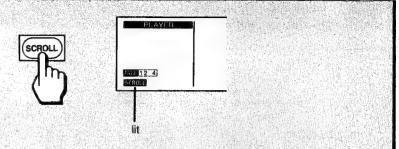
Displaying the Title as It is

Press the PAGE button of the desired title.To turn off the title, press the DISPLAY OFF button.

Displaying the Title Scrolled from Bottom to Top







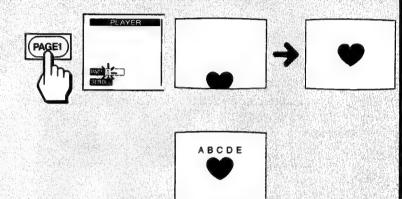
Press the PAGE button of the desired title.

The PAGE indication flashes in the display window.

The title appears and scrolls from the bottom to the center.

When a character titles is stored with the video image title:

The character title appears after the video image title stops at the center.

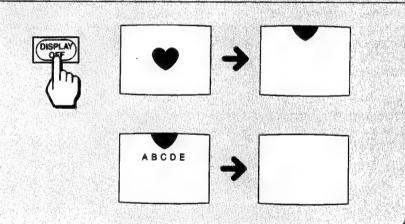


To turn off the title, press the DISPLAY OFF button.

The title scrolls from center to top and disappears.

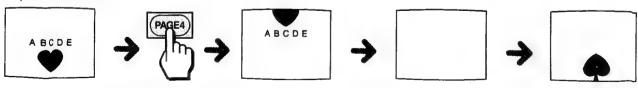
When a character title is stored with the video image title:

The character title disappears after the video image disappears.



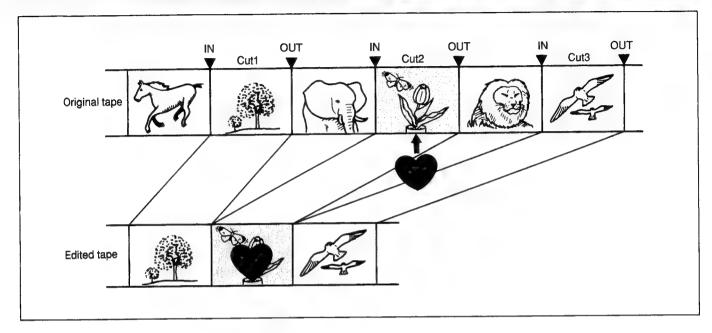
To scroll the titles in succession

For example, to scroll the title in PAGE 4 after the title in PAGE 3, press the PAGE 4 button when the title in PAGE 3 stops at the center.



After the title in PAGE 3 disappears, the title in PAGE 4 appears from the bottom of the screen.

Superimposing Titles in Program Editing



To insert the titles in the program, designate the desired title while designating Cuts.

To insert the titles after designating Cuts, locate the position to insert the title using the ⇔ PGM/PGM ⇒ buttons and press the PAGE button. In this case, you cannot superimpose the title scrolled.

Note

When a title is superimposed in a Cut, the title appears several frames delayed from the designated IN and OUT points of the Cut.

For program editing operation, see page 22.

To check whether the title was correctly inserted or not, preview the program by pressing PREVIEW button before pressing the PGM EDIT button.

To Superimpose the Title

Let's superimpose the title in PAGE 3 as Cut 2 of the program, for example.

- To begin program editing, press the PGM button.
- Designate the IN and OUT points of Cut 1.
- Locate the scene where you want to superimpose the title, and set the player to the playback pause mode.
- Press the ENTRY button.
 The IN point of the Cut 2 is designated.
- Press the PAGE 3 button.
 The title in PAGE 3 is superimposed on the playback picture of Cut 2.
- Press the ENTRY button at the end point of Cut 2. The OUT point of Cut 2 is designated.
- **7** Continue designating.

When you scroll the title

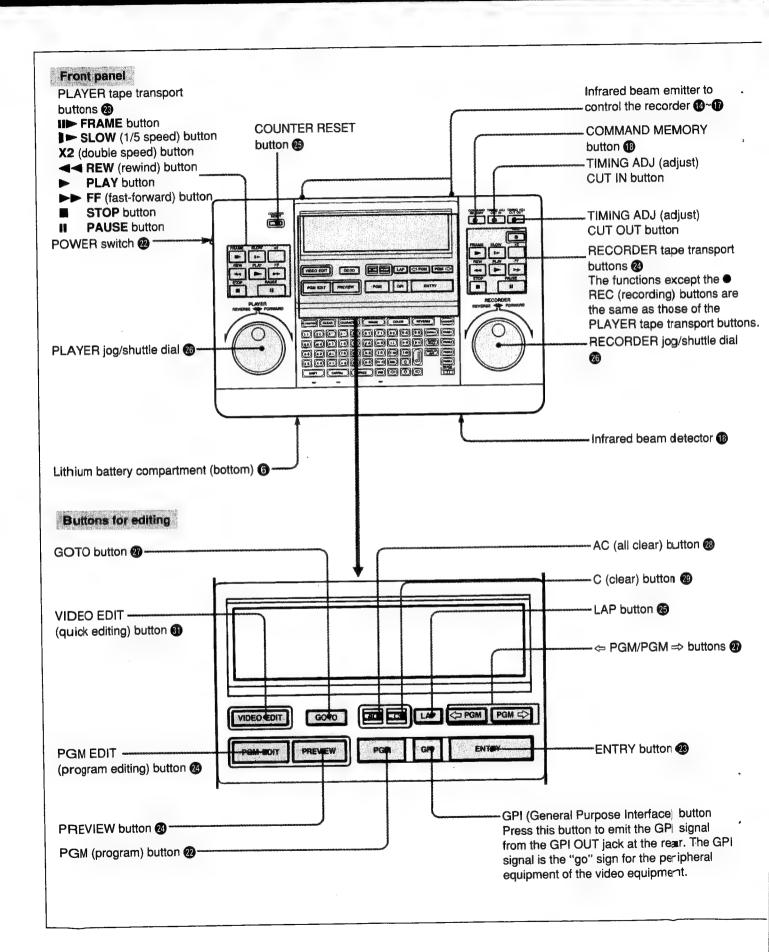
- The title appears and scrolls from the bottom to the center
 of the screen in a Cut, and then scrolls up from the center
 to the top and disappears in the next Cut. For this
 operation, the 2 Cuts must be a continuous scene.
 Designate the OUT point of the Cut where you
 superimposed the title and the IN point of the next Cut by
 pressing the ENTRY button twice.
- While designating the Cuts, the title does not scroll even if the SCROLL indication is on the display window.

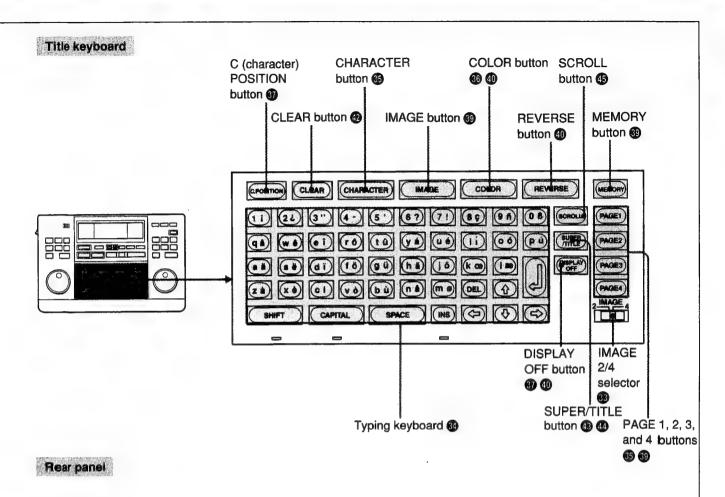
To cancel the title

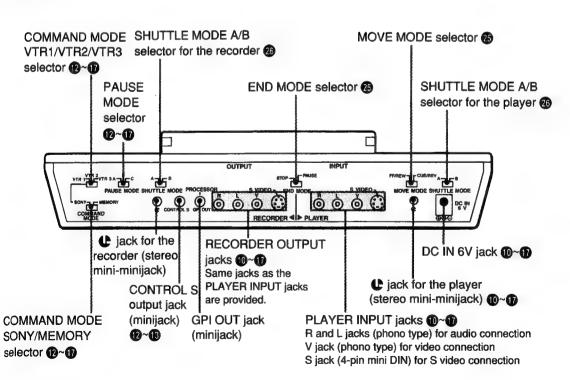
- 1 Locate the IN or OUT point of the Cut where the itle is superimposed.
- 2 Press the DISPLAY OFF button.

To change the title

- 1 Locate the IN or OUT point of the Cut where the itle is superimposed.
- 2 Press the PAGE button to be newly designated.







Troubleshooting

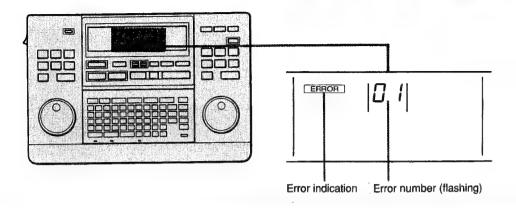
If you have a problem, go through the following list. If the problem is not included in the list, unplug the unit and contact your Sony dealer or local authorized Sony service facility.

Symptom	Possible causes
Turned on the POWER switch, but no indications appear in the display window.	 The AC power adaptor is disconnected from the wall outlet. The AC power adaptor is disconnected from the RM-E700.
☼ is lit in the display window.	The lithium battery is not inserted, or is dead.
Pressed the ► PLAY button of the PLAYER section, but the playback picture does not appear.	 The player is not turned on. The input/output selector of the player is set to input. → Set to output. The tape is at the end. The player is not connected with the RM-E700. The player is set to camera mode. → Set to video mode.
Pressed PGM EDIT, but the program editing does not start.	 The recorder was not in the recording pause mode when you pressed the PGM EDIT button. → Set the recorder to recording pause mode. The functions of the remote control unit of the recorder was not correctly stored. → Store again, see page 18. The recorder and player are not correctly connected with the RM-E700. The tape in the player has been rewound to the beginning. Program editing is not possible during about 15 seconds (15 counts) from the beginning. The player has an infrared beam detector and a command mode which is the same as that of the recorder. The COMMAND MODE selector is set wrong. The recorder is not turned on, or is set to camera mode.
In case of connection 1 or 2, the program editing does not start.	 No tape in the recorder. The safety tab of the tape is set to prevent recording. The tape in the recorder is at the end. The recorder and player are not correctly connected to the RM-E700.

Symptoms caused by the VTR used
According to the VTR used, the following symptoms will appear. They are neither failures of the RM-E700 nor the VTR used.

İtem	Symptom	Model
Recording mode indication	When the VTR is in the recording mode, ßI appears in the display window of the RM-E700.	SLV-801, SLV-802, SLV-201, SLV-201F, SLV-202
Counter indication	When the VTR plays back a tape recorded in the LP mode, the counter shows half of the actual playback time. Therefore, the total lap time is also half of the actual lap time.	CCD-F30, CCD-F40, CCD-V9, CCD-F330E, CCD-F340E, CCD- F90E
	When the counter shows a minus count, the count of the VTR is 1 second different from that of the RM-E700.	The model with time counter (H:M:S counter) and frame indication SL-HF1000, EDV-9500
Tape transportation during program editing or program previewing	When the MOVE MODE selector is set to CUE/REV, the tape moves by repeating cue/review and playback pause alternately. To avoid this, we recommend setting the MOVE MODE selector to FF/REW.	EV-C3, EV-P2
Frame-by-frame playback	When the VTR is connected to the CONTROL L connector of the RM-E700, the picture is played back one frame with every push of the FRAME button. The playback pause indications (▶, PAUSE) appear in the display window of the RM-E700.	SLV-402
Double speed playback When the VTR is connected to the CONTROL L connector of the RM-E700, and you press the X2 button of the RM-E700, the STOP indication appears in the display window. However, the VTR enters the playback mode, as the VTR has no X2 function.		SLV-802

Error Messages in the Display Window



Error No.	Message	Countermeasure	
01	The OUT point comes before the IN point of the Cut.	Locate the unnecessary IN or OUT point using ⇔PGM/PGM⇔, and press C. Designate again.	
02	The IN or OUT point of the previously programed Cut is designated again.	If you want to change the IN or OUT point of the Cut, see page 27. To program another Cut, locate the desired IN or OUT point using ⇔PGM/GPM⇒ buttons.	
03	The previous program remains in the RM-E700. The counter (hour/minute/second, 4-digit, RC time code) of the previous player was different from that of the present player.	Press AC to clear all the Cuts, then enter a new program. When the player has a counter selector, set to the same counter.	
05	You pressed PGM when the player is neither connected nor turned on.	Connect the player to the RM-E700 or turn on the player. 1)	
06	The player is disconnected while you are programming, or while you are sending the tape from the IN point to the OUT using GO TO.	Connect the player and the RM-E700, or turn on the player. 1)	
78 10 24 10 10 10 10 10 10 10 1	When beginning the program editing, the counter (hour/minute/second, 4-digit, RC time code) of the program is different from that of the present player.	Press AC to cancel all the Cut, then enter the program again. When the player has a counter selector, set to the same counter before program editing.	
	During the program editing, the necessary function of the remote control unit was not stored, when the recorder is not Sony's.	Store the function of the remote commander, see page 18. It is necessary to store the recording, playback, stop, fast-forward, rewind and pause functions.	
12	During the program editing or scene-by-scene editing, the safety tab of the tape in the recorder is set to prevent recording.	Check if you may record on the tape, then set the safety tab for recording.	
15	When the player is not connected, or is not turned on, you pressed either PGM EDIT, VIDEO EDIT, or PREVIEW button.	Connect the player and the RM-E700, or turn on the player. 1)	

Error No.	Message	Countermeasure	
16	During program editing, previewing, or scene-by- scene editing, the player is disconnected, or is turned off.	Connect the player and the RM-E700, or turn on the player. 1)	
41	Appears when you try to store the video image title in PAGE 3 or 4 with the IMAGE 2/4 selector set to 2.	When the IMAGE 2/4 selector is set to 2, you cannot store the video image title in PAGE 3 or 4. To store the video image title in PAGE 3 or 4, set the IMAGE 2/4 selector to 4.	
50	During editing by the RC time code, appears when a Cut is as long as 4 to 29 frames (4/30 to 29/30 seconds) for the NTSC system models, and 4 to 24 frames (4/25 to 24/25 seconds) for the PAL models.	With some player or recorder models, you may not be able to edit as desired. After programming, check that the program editing is operative. ²⁾	

- 1) With some player models, the error message does not
- appear when the player is turned off.

 2) With some player or recorder models, the program editing is inoperative even if the error message does not appear, when the Cut is more than 1 second long. After programming, check that the program editing is operative.

Specifications

Video input

Phono jack (1)

1 Vp-p, 75 ohms, unbalanced, sync negative

S video input

4-pin mini-DIN (1)

Luminance signal: 1 Vp-p, 75 ohms,

unbalanced, sync negative

Chrominance signal: 0.286 Vp-p (NTSC) or 0.300 Vp-p (PAL), 75 ohms, unbalanced

Video output

Phono jack (1)

1 Vp-p, 75 ohms, unbalanced, sync negative

S video output

4-pin mini-DIN (1)

Luminance signal: 1 Vp-p, 75 ohms,

unbalanced, sync negative

Chrominance signal: 0.286 Vp-p (NTSC) or 0.300 Vp-p (PAL), 75 ohms, unbalanced

Audio input

Phono jacks (2)

Audio output

Phono jacks (2)

LANC (connector for the player

Stereo mini-minijack (1)

LANC connector for the recorder

Stereo mini-minijack (1)

CONTROL S connector for the recorder

Minijack (1)

GPI output

Minijack (1)

General

Power requirement 6 V DC IN

Power consumption 5 W

Dimensions

Approx. $355 \times 80 \times 230$ mm (w/h/d)

(14 × 31/4 × 91/8 inches)

Weight

Approx. 1.5 kg (3 lb 5 oz)

Supplied accessories

See page 5.

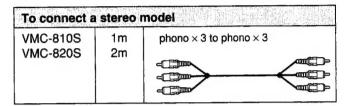
Design and specifications are subject to change without notice.

This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

Optional Connecting Cables

The table below shows the optional connecting cables for your reference.

Audio/video connecting cable



The state of the state of the state of	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	The second state of the se
VMC-710M VMC-720M	1m 2m	phono × 2 to phono × 2

To connect		
YC-10V YC-15V	1m 1.5m	4-pin mini-DIN to 4-pin mini-DIN
		₹

Audio connecting cable		
RK-C73 RK-C74 RK-C75	1m 1.5m 2m	phono x 2 to phono x 2

English

Table to Note your Program

Use the following table to note your program. Title Cut No. **Counter of IN point Counter of OUT point** Title Contents Remarks